

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A transmitter comprising:

a power amplifier having a power supply input and an output for supplying a transmission signal with an output power,

a power supply having power supply outputs for supplying a first power supply voltage having a first level and a second power supply voltage having a second level being higher than the first level,

a switching circuit arranged between the power supply outputs and the power-supply input, and

a controller for supplying, in response to a first power change command indicating a first desired level of the output power, a control signal to the switching circuit to supply the first power supply voltage to the power supply input, and for supplying, in response to a second power change command indicating a second desired level of the output power and succeeding the first power change command, the control signal to the switching circuit to supply either the first power supply voltage or the second power supply voltage to the amplifier power supply input depending on values of said first desired level and said second desired level;

wherein the transmitter is arranged for operation in a transmission system based on time slots, and wherein the first power change command indicates a value of the output power required during a time slot starting after an instant of occurrence of the first power change command, and wherein the second power change command indicates a value of the output power required during a next time slot succeeding the first mentioned time slot and starting after an instant of occurrence of the second power change command.

2. (original) A transmitter as claimed in claim 1, wherein the transmitter is a handheld apparatus and further comprises a receiving circuit for receiving a power control command

from a base station to supply the first power change command and the second power change command.

3. (canceled)

4. (currently amended) A transmitter as claimed in claim 13, wherein the controller is arranged

for supplying the control signal to the switching circuit to supply the second power supply voltage to the power amplifier at substantially an instant the second power change command indicates that the output power has to increase, or at the latest at a start of the next time slot, and

for controlling the power supply to increase the first level to above the second level before a start of a time slot succeeding the next time slot.

5. (currently amended) A transmitter as claimed in claim 13, wherein the controller is arranged for supplying the control signal to the switching circuit to supply the first power supply voltage to the power amplifier at substantially a start of the next time slot if the second power change command indicates that the output power has to decrease, and for controlling the power supply to decrease the second level below the first level.

6. (original) A transmitter as claimed in claim 5, wherein the controller is arranged for supplying the control signal to the switching circuit to supply the second power supply voltage after the second level decreased below the first level.

7. (original) A transmitter as claimed in claim 5, wherein the controller is arranged for supplying the control signal to the switching circuit to supply the second power supply voltage at substantially an instant a third power change command is received during the next time slot, or at a start of a time slot succeeding the next time slot, if the third power change command indicates that still the lower output power indicated by the second power change command is required.

8. (original) A transmitter as claimed in claim 5, wherein the controller is arranged for supplying the control signal to the switching circuit to supply the second power supply voltage at substantially an instant a third power change command is received during the next time slot, or at a start of a time slot succeeding the next time slot, if the third power change command indicates that a lower output power than indicated by the second power change command is required.

9. (currently amended) A transmitter as claimed in claim ~~13~~, wherein the controller is arranged for supplying the control signal to the switching circuit to supply the second power supply voltage to the power amplifier at substantially the instant the second power change command is received, or at substantially a start of the next time slot, if the second power change command indicates that the output power has to decrease, and for controlling the power supply to allow the second level to drop, while the first level is kept substantially constant.

10. (currently amended) A transmitter as claimed in claim ~~13~~, wherein the controller is arranged for supplying the control signal to the switching circuit to supply the first power supply voltage to the power amplifier at substantially the instant the second power change command indicates that the output power has to decrease, and for controlling the power supply to allow the first level to drop.

11. (original) A transmitter as claimed in claim 10, wherein the controller is arranged for controlling the power supply to keep the level of the non-used second power supply voltage substantially constant.

12. (original) A transmitter as claimed in claim 1, wherein the power supply is arranged for supplying a third power supply voltage having a third level, and wherein the controller is arranged for dynamically controlling the power supply to supply the second level which is higher than the first level, and the third level which is lower than the first level.

13. (original) A transmitter as claimed in claim 12, wherein the controller is arranged for

controlling the switching circuit to supply either the first power supply voltage, the second power supply voltage, or the third power supply voltage to the amplifier power supply input, depending on whether the second power change command indicates that the output power has to be stable, to increase, or to decrease, respectively.

14. (original) A transmitter as claimed in claim 12, wherein the controller is arranged for controlling

the switching circuit to supply either the second power supply voltage or the third power supply voltage to the amplifier power supply input if the output power has to be changed, and

the power supply to only adapt the second level or the third level depending on whether the second level or the third level has the largest difference from a level of a power supply voltage supplied to the amplifier power supply input.

15. (original) A transmitter as claimed in claim 12, wherein the controller is adapted for controlling

the switching circuit to supply either the second power supply voltage or the third power supply voltage to the amplifier power supply input if the output power has to be changed, and

the power supply to adapt

(i) the first level and the third level if the second power supply voltage is supplied to the amplifier power supply input, wherein the first level is controlled for exceeding the second level, or

(ii) the first level and the second level if the third power supply voltage is supplied to amplifier power supply input, wherein the first level is controlled for exceeding the third level.

16. (currently amended) A method in a transmitter comprising a power amplifier having a power supply input and an output for supplying a transmission signal with an output power, and a power supply having power supply outputs, for supplying a first power supply voltage

having a first level and a second power supply voltage having a second level, higher than the first level, the method comprising:

controlling, the first power supply voltage to be supplied to
the power supply input, in response to a first power change command indicating a first desired level of the output power, and
controlling, either the first power supply voltage or the second power supply voltage to be supplied to the amplifier power-supply input in response to a second power change command indicating a second desired level of the output power and succeeding the first power change command, depending on values of said first desired level and said second desired level;

wherein the transmitter is arranged for operation in a transmission system based on time slots, and wherein the first power change command indicates a value of the output power required during a time slot starting after an instant of occurrence of the first power change command, and wherein the second power change command indicates a value of the output power required during a next time slot succeeding the first mentioned time slot and starting after an instant of occurrence of the second power change command.

17. (canceled)

18. (currently amended) A system comprising a base station and a transmitter comprising:

a power amplifier having a power supply input and an output for supplying a transmission signal with an output power,

a power supply having power supply outputs for supplying a first power supply voltage having a first level and a second power supply voltage having a second level, higher than the first level,

a switching circuit arranged between the power supply outputs and the power supply input, and

a controller for supplying a control signal to the switching circuit in response to a first power change command indicating a first desired level of the output power, to supply the first power supply voltage to the power-supply input, and for supplying, the control signal to the switching circuit, in response to a second power change command indicating a second

desired level of the output power and succeeding the first power change command to supply either the first power supply voltage or the second power supply voltage to the amplifier power supply input

depending on values of said first desired level and said second desired level;
wherein the transmitter is arranged for operation in a transmission system based on time slots, and wherein the first power change command indicates a value of the output power required during a time slot starting after an instant of occurrence of the first power change command, and wherein the second power change command indicates a value of the output power required during a next time slot succeeding the first mentioned time slot and starting after an instant of occurrence of the second power change command.

19. (canceled)

20. (new) A transmitter comprising:

a power amplifier having a power supply input and an output for supplying a transmission signal with an output power,

a power supply having power supply outputs for supplying a first power supply voltage having a first level and a second power supply voltage having a second level being higher than the first level,

a switching circuit arranged between the power supply outputs and the power-supply input, and

a controller for supplying, in response to a first power change command indicating a first desired level of the output power, a control signal to the switching circuit to supply the first power supply voltage to the power supply input, and for supplying, in response to a second power change command indicating a second desired level of the output power and succeeding the first power change command, the control signal to the switching circuit to supply either the first power supply voltage or the second power supply voltage to the amplifier power supply input depending on values of said first desired level and said second desired level;

wherein the power supply is arranged for supplying a third power supply voltage having a third level, and wherein the controller is arranged for dynamically controlling the

power supply to supply the second level which is higher than the first level, and the third level which is lower than the first level; and

wherein the controller is arranged for controlling

the switching circuit to supply either the second power supply voltage or the third power supply voltage to the amplifier power supply input if the output power has to be changed, and

the power supply to only adapt the second level or the third level depending on whether the second level or the third level has the largest difference from a level of a power supply voltage supplied to the amplifier power supply input.

21. (new) A transmitter comprising:

a power amplifier having a power supply input and an output for supplying a transmission signal with an output power,

a power supply having power supply outputs for supplying a first power supply voltage having a first level and a second power supply voltage having a second level being higher than the first level,

a switching circuit arranged between the power supply outputs and the power-supply input, and

a controller for supplying, in response to a first power change command indicating a first desired level of the output power, a control signal to the switching circuit to supply the first power supply voltage to the power supply input, and for supplying, in response to a second power change command indicating a second desired level of the output power and succeeding the first power change command, the control signal to the switching circuit to supply either the first power supply voltage or the second power supply voltage to the amplifier power supply input depending on values of said first desired level and said second desired level;

wherein the power supply is arranged for supplying a third power supply voltage having a third level, and wherein the controller is arranged for dynamically controlling the power supply to supply the second level which is higher than the first level, and the third level which is lower than the first level;

wherein the controller is adapted for controlling

the switching circuit to supply either the second power supply voltage or the third power supply voltage to the amplifier power supply input if the output power has to be changed, and

the power supply to adapt

(i) the first level and the third level if the second power supply voltage is supplied to the amplifier power supply input, wherein the first level is controlled for exceeding the second level, or

(ii) the first level and the second level if the third power supply voltage is supplied to amplifier power supply input, wherein the first level is controlled for exceeding the third level.